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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 09/617,480 | 07/17/2000 | Fredrik Olsson | 3COM-2366.MCD.US.P | 7568 |
| 7590 12/29/2004 | | | EXAMINER | |
| Wagner Murabito & Hao LLP | | | SEFCHECK, GREGORY B | |
| Third Floor | | | ART UNIT | |
| Two North Market Street | | | PAPER NUMBER | |
| San Jose, CA 95113 | | | 2662 | |

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/617,480 | OLSSON ET AL. | |
| | Examiner | Art Unit | |
| | Gregory B Sefcheck | 2662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- The Applicant's Amendment filed 5/3/2004 is acknowledged.
- Claims 17, 23-33 have been amended.
- Claims 17-35 are pending.
- The drawings submitted 5/3/2004 are approved by the Examiner. The previous objection to the drawings is withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 17-22 and 32-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Regarding Claims 17 and 32,

The "passive detection tests" employed by the plurality of detection devices in claims 17 and 32 was not described in the specification. The detection devices disclose switching electrical pathways and sending control signals once a connection determination has been made, illustrating an active component to the detection process.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler et al. (US006504851B1), hereafter Adler, in view of Blackwell et al. (US005671251A), hereafter Blackwell.

- In regards to Claim 17, 20-23, 25-27, 32, 34, and 35,

Abler discloses a method and interface adapter receptacle with a plurality of connecting electrical lines to automatically detect which of a plurality of possible connection types is being received on a connection (Col. 1, lines 15-16; Col. 4, lines 47-50; claim 17,23,32 – apparatus and method allowing multiple connection types; claim 17,23,32 – providing a peripheral with receptacle having a plurality of electrical lines used to detect more than one type of connection).

Referring to Figs. 1 and 4, Adler shows that the receptacle uses the electrical lines of an RJ-45 connector to detect more than one connection type. Protocol Selection Logic 220 cycles through the appropriate contacts on the connector (Col. 7-9, lines 52-15; claim 17,23,32 – switching logic adapted to couple lines to detection devices to allow detection of type of connection).

Adler utilizes various detection entities (306/314/322/330/338/348) for detecting the types of connections (claim 17,23,32 – plurality of detection devices for detecting the types of connections). Because all possible connection types use a standardized connector, this detection can be done without the use of an intermediate connector device (Fig. 1, 6; Col. 1, lines 44-47; claim 23 – more than one connection can be made without an intermediate connection).

Pathways through the interface are established for a detected connection type. If a specific connection is not detected, the contacts are switched for an attempt at detecting the other connection types (Col. 7, lines 18-32; claim 32 – determining if detection devices detect a connection, if not, repeating the process for the other connection types; claim 32 – establishing appropriate pathway for communication with detected connection type).

Adler does not explicitly show the detection devices operable to employ passive detection tests for detecting the type of connection by detecting voltage and current.

Blackwell discloses a method and apparatus for passively detecting a connection type amongst various modem connection types by detecting the level of voltage being received (Col. 6-7, lines 62-5; claim 20,25,34 – one of detection devices is operable to detect type of connection by detecting voltage). Blackwell also shows the use of detecting line current as signaling information for a specific type of connection (Col. 9, lines 8-13; claim 21,22,26,27,35 – one of detection devices is operable to detect type of connection by detecting current).

It would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the method and apparatus of Abler by explicitly utilizing detected voltage and/or current detected on the plurality of signal lines for detecting the type of connection being received, as taught by Blackwell. Various connection types can communicate carrying voltages and currents, at different levels, providing a built-in way of passively differentiating which connection type is presently being received on a multi-connection interface.

- In regards to Claims 18, 19, 24, 29, and 33,

Abler discloses a method and interface adapter receptacle with a plurality of connecting electrical lines to automatically detect which of a plurality of possible connection types is being received on a connection that covers all limitations of the parent claims.

Adler shows that different physical tests are used to detect the various types of connections, of which one of the types of connections is a LAN (Col. 4-5, lines 65-30; claims 18,33 – detection devices operable to detect the type of connection by a physical test; claim 19,24 – two of detection devices use a different physical test from one another; claim 29 – one of the connection types is a LAN).

- In regards to Claims 28, 30, and 31,

Abler discloses a method and interface adapter receptacle with a plurality of connecting electrical lines to automatically detect which of a plurality of connection types is being received on a connection that covers all limitations of the parent claims.

Adler does not show determining a modem or ISDN connection as one of the types of connections.

The method and apparatus of Adler is utilized by switching the connecting lines of the connector (receptable) which carefully and non-disruptively orders the protocol detection steps. Separate and independent protocol transceivers, MACs, status & control, and storage units (detection devices) for each connection possibility are utilized while switching between pathways to determine the connection type being received. The method and apparatus could be adapted to implement detection of other connection types over the same standardized connector by replacing or adding independent detection devices for other connection types, such as a modem or ISDN connection (claim 28 – one of the connection types is ISDN; claim 30 – one of the connection types is modem; claim 31 – a third of the types of connections is ISDN).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus and method of Adler for determining modem and ISDN connections. It is well known that modem and ISDN connections can use the standardized RJ-45 connector disclosed by Adler, as shown in the specification of the applicant on pg. 14, line 6. Modifying the Adler's apparatus and method for determining modem and ISDN connections as well as various LAN-type connections would allow

one interface card to be used for reception of more/all connection types/protocols from a common connector, thus reducing necessary internetworking components and cost to the user.

Response to Arguments

8. Applicant's arguments with respect to claims 17 and 23 regarding detection devices employing passive detection have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments filed 5/3/2004 have been fully considered but they are not persuasive.

- In the Remarks on pgs. 8-9 of the Amendment, the Applicant contends that Abler does not disclose at least one of the plurality of electrical connecting lines is used to detect more than one type of communication protocol used in a connection to be made directly to the receptacle.
 - The Examiner respectfully disagrees. Fig. 1 of Abler shows that several contact lines are used for multiple communication protocols in a connection to the common RJ-45 receptacle.
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- In the Remarks on pg. 10 of the Amendment, the Applicant contends that it would not be obvious to one of ordinary skill in the art to modify Abler for

detecting ISDN or a modem because Abler teach a procedure for setting a transceiver such that different types and speeds of LANs are detected.

- The Examiner respectfully disagrees. Abler discloses detecting different LAN types and speeds by explicitly disclosing several different protocols (ATM, Ethernet) simply as examples. It is the Examiner's opinion that the detection shown by Abler would obviously extend to other protocols, such as a modem or ISDN, that are capable of interfacing a local area network through the common connector.

- In the Remarks on pg. 11 of the Amendment, the Applicant contends that adding a detection device to Abler that detects voltage or current would render Abler inoperative.

- The Examiner respectfully disagrees. As discussed above, Abler discloses detection of various LAN protocols and speeds through a common connector, as claimed in the present application. Though Abler does not explicitly disclose detection of a modem connection, it has been shown above that it would be obvious to one of ordinary skill in the art to modify Abler for detection of any LAN connection-type capable of utilizing the common connector. The methods of detection used for each connection-type would depend upon the type of connection considered by the apparatus. Therefore, if a modem connection is to be considered by the common connector, then it would be obvious to utilize voltage and

current detection tests for selecting between various modem connection types, as shown by Blackwell.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

GBS
12-21-2004



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